(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau

PAIPO OMPIA



(43) International Publication Date 22 January 2004 (22.01.2004)

PCT

(10) International Publication Number WO 2004/007553 A1

- (51) International Patent Classification⁷: C07K 16/18, C12N 15/13, 15/63, A61K 39/395, C12N 5/10, A01K 67/027
- (21) International Application Number:

PCT/EP2003/007487

- (22) International Filing Date: 10 July 2003 (10.07.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: MI2002A001527

11 July 2002 (11.07.2002) I

- (71) Applicants (for all designated States except US): UNI-VERSITA' DEGLI STUDI DI TRIESTE [IT/IT]; Piazzale Europa, 1, I-34127 Trieste (IT). CONSIGLIO NAZIONALE DELLE RICERCHE [IT/IT]; Piazzale Aldo Moro,7, I-00185 Roma (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): TEDESCO, Francesco [IT/IT]; Via Del Guardi, 3, I-34143 Trieste (IT). MARZARI, Roberto [IT/IT]; Via Dei Berlam, 9, I- 34136 Trieste (IT).
- (74) Agent: GERVASI, Gemma; Notarbartolo & Gervasi S.p.A., Corso di Porta Vittoria, 9, I-20122 Milano (IT).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIBODIES ANTI-C5 COMPONENT OF THE COMPLEMENT SYSTEM AND THEIR USE

(57). Abstract: The present invention refers to recombinant antibodies of human origin specific for the C5 component of the activated complement and characterised by the ability to inhibit the conversion of the C5 alpha chain to C5a and C5b. Moreover the present invention refers to the nucleotide sequences coding for such antibodies and to the therapeutic use of both polypeptide and nucleotide sequences, in particular for the therapy of diseases involving tissue damage deriving from uncontrolled activation of the complement system.



70 2004/007553